

WHAT IS CLAIMED IS:

1. An optical recording medium in which main information, and additional information required for reproducing the main information are recorded,

wherein:

the additional information is physically formed, and

copyright protection information by digital watermarking is embedded in the main information.

2. An optical recording medium in which main information, and additional information required for reproducing the main information are recorded,

wherein:

the additional information is formed by pits, a depth of the pits being formed according to the additional information, and

copyright protection information by digital watermarking is embedded in the main information.

3. The optical recording medium according to claim 2, wherein:

the pits include a first pit having a first depth and a second pit having a second depth, and

when a wavelength of a reproduction light beam is

λ and a refractive index of the optical recording medium is n , the first depth is less than $\lambda/4n$, and the second depth exceeds $\lambda/4n$.

4. An optical recording medium in which main information, and additional information required for reproducing the main information are recorded,

wherein:

the additional information is formed by pits,

all of the pits have an equal depth and are formed at a position shifted from a regular pit position in a track direction according to the additional information, and

copyright protection information by digital watermarking is embedded in the main information.

5. An optical recording medium in which an error correcting code with respect to main information is provided in the form of pits by a unit of error correcting code block,

wherein:

information in plural predetermined regions in the error correcting block, which is the main information corresponding to the error correcting code, is changed and recorded as the main information, and

copyright protection information by digital watermarking is embedded in the main information.

6. A reproducing apparatus comprising:

reproducing means for reproducing an optical recording medium which has been loaded; and

reproduction restricting means for judging that the optical recording medium which has been loaded is the one by unauthorized copying, so as to restrict reproduction by said reproducing means, when the optical recording medium reproduced by said reproducing means is an optical recording medium in which main information, and additional information required for reproducing the main information are recorded, the additional information being physically formed, the main information being embedded with copyright protection information by digital watermarking, and when said reproducing means does not reproduce the additional information and reproduces the copyright protection information.

7. A reproducing apparatus comprising:

reproducing means for reproducing an optical recording medium which has been loaded; and

reproduction restricting means for judging that

the optical recording medium which has been loaded is the one by unauthorized copying, so as to restrict reproduction by said reproducing means, when the optical recording medium reproduced by said reproducing means is an optical recording medium in which main information, and additional information required for reproducing the main information are recorded, the additional information being formed by pits, a depth of the pits being formed according to the additional information, the main information being embedded with copyright protection information by digital watermarking, and when said reproducing means does not reproduce the additional information and reproduces the copyright protection information.

8. A reproducing apparatus comprising:

reproducing means for reproducing an optical recording medium which has been loaded; and

reproduction restricting means for judging that the optical recording medium which has been loaded is the one by unauthorized copying, so as to restrict reproduction by said reproducing means, when the optical recording medium reproduced by said reproducing means is an optical recording medium in which main information, and additional information required for

reproducing the main information are recorded, the additional information being formed by pits, a depth of the pits being formed according to the additional information, the main information being embedded with copyright protection information by digital watermarking, the pits further including a first pit having a first depth and a second pit having a second depth, the first depth being less than $\lambda/4n$ and the second depth exceeding $\lambda/4n$ where λ is a wavelength of a reproduction light beam and n is a refractive index of the optical recording medium, and when said reproducing means does not reproduce the additional information and reproduces the copyright protection information.

9. A reproducing apparatus comprising:

reproducing means for reproducing an optical recording medium which has been loaded; and

reproduction restricting means for judging that the optical recording medium which has been loaded is the one by unauthorized copying, so as to restrict reproduction by said reproducing means, when the optical recording medium reproduced by said reproducing means is an optical recording medium in which main information, and additional information required for

reproducing the main information are recorded, the additional information being formed by pits, all of the pits having an equal depth and being formed at a position shifted from a regular pit position in a track direction according to the additional information, the main information being embedded with copyright protection information by digital watermarking, and when said reproducing means does not reproduce the additional information and reproduces the copyright protection information.

10. A reproducing apparatus comprising:

reproducing means for reproducing an optical recording medium which has been loaded; and

reproduction restricting means for judging that the optical recording medium which has been loaded is the one by unauthorized copying, so as to restrict reproduction by said reproducing means, when the optical recording medium reproduced by said reproducing means is an optical recording medium in which an error correcting code with respect to main information is provided in the form of pits by a unit of error correcting block, information in plural predetermined regions in the error correcting block, which is the main information corresponding to the error correcting

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
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